

IN THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

Claims 7 to 12 have been amended for informalities.

Listing of Claims

Claims 1 to 6 (canceled).

Claim 7 (currently amended): ~~Method~~A method of manufacturing tubes intended for making all or the external part of a sheathing tube for a nuclear fuel rod or a guide tube for a nuclear fuel assembly, ~~characterized in that a bar is formed of a zirconium based alloy which also contains, comprising:~~

forming a bar of a zirconium based alloy which also contains;

0.03 to 0.25% in total firstly of iron;₁

secondly, at least one of the elements selected from the group consisting of chromium and vanadium;₁

0.8 to 1.3% of niobium;₁

less than 2000 ppm of tin;₁

500 to 2000 ppm of oxygen;₁

less than 100 ppm of carbon;₁

5 to 35 ppm of sulfur; and

less than 50 ppm of silicon;₁

[[₁-]]quenching the bar in water after heating to between 1000° and 1200°C;₁

[[₁-]]extruding a blank after heating to a temperature of between 600°C and 800°C;₁

[[₁-]]cold-rolling said blank in at least four passes to obtain a tube, with intermediate heat treatments between 560°C and 620°C;₁ and

[[₁-]]applying a final heat treatment between 560°C and 620°C, all the heat treatments being applied in an inert atmosphere or under vacuum.

Claim 8 (currently amended): ~~Method~~The method as ~~claimed~~ recited in claim 7, ~~characterized in that wherein~~ the alloy contains at most 0.20% of iron.

Claim 9 (currently amended): ~~Method~~The method as ~~claimed~~ recited in claim 7, ~~characterized in that wherein~~ the Fe/(Cr+V) ratio is between 0.5 and 30 by weight.

Claim 10 (currently amended): ~~Method~~The method as ~~claimed~~ recited in claim 7, ~~characterized in that wherein~~ the Fe/(Cr+V) ratio is at least 0.5 and the content of Fe+Cr+V is at least 0.03%.

Claim 11 (currently amended): ~~Method~~The method as ~~claimed~~ recited in any one of the claims 7 to 10, ~~characterized in that wherein~~ the oxygen content is between 1000 and 1600 ppm.

Claim 12 (currently amended): ~~Method~~The method as ~~claimed~~ recited in claim 7[[,]] wherein the final heat treatment brings the tube to a recrystallized state.